Comments of the San Luis Obispo Mothers for Peace ("MFP") on the *Committee Draft 2005 Integrated Energy Policy Report*

2005 IEPR - Docket # 04-IEP-1
04 IEP 1K Committee Draft Document Hearings
Submitted by: Morgan Rafferty
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The San Luis Obispo Mothers for Peace ("MFP") appreciates the opportunity to offer these comments on the Committee Draft of the 2005 Integrated Energy Policy Report ("Draft IEPR") of the California Energy Commission ("CEC" or "Commission"). In addition to addressing some broad issues concerning California's energy policy these comments focus on the Draft IEPR's treatment of nuclear power. MFP previously provided oral (August 16, 2005) and written comments (August 23, 2005) on the Commission's August 2005 draft consultant report, *Nuclear Power in California: 2005 Status Report*, as well as oral comments (October 6, 2005) on the Draft IEPR, and respectfully requests that these earlier comments be incorporated by reference herein. To facilitate this we have attached our August 23, 2005 written comments on nuclear power to these comments as Attachment A.

General

Public Health and Safety, as Well as Environmental Soundness, Should be First and Foremost Among the Necessary Conditions in Making the State's Energy Resource Decisions

In its oral comments during the October 6 IEPR hearings the Natural Resources Defense Council ("NRDC") commented that the IEPR executive summary should be amended to make clear that among the State's foremost considerations in choosing energy resource options is that they be environmentally sound. MFP endorses the need for this to be made explicit and prominent in the IEPR, both in the executive summary and elsewhere as appropriate. In addition, MFP requests that the IEPR make equally explicit and prominent that energy resource choices need to be made with public health and safety as fundamental considerations. This requirement is explicit and prominent in the Warren-Alquist Act (§ 25001)[1] and deserves to be made so in the 2005 IEPR as well.

[1] § 25001 of the Warren Alquist Act states in part that "...it is the responsibility of state government to ensure that a reliable supply of electrical energy is maintained at a level consistent with the need for such energy for protection of public health and safety, for promotion of the general welfare, and for environmental quality protection."

The IEPR Should Explicitly Require that Energy Resource Procurement Follow Integrated Resource Planning Principles

MFP and other parties previously have filed comments at various stages of the 2005 IEPR process stressing the importance of the IEPR articulating a policy framework in which energy resource options are planned for, procured for, and selected based on principles of integrated resource planning ("IRP"). The CEC received at least one set of such comments, from NRDC, during the early scoping phase of the 2005 IEPR process.[2]

Despite these comments the Draft IEPR does not contain overarching language calling for an analytical and planning framework that the State and the energy utilities can use to both guide and evaluate resource planning and procurement. IRP calls for explicit characterization and evaluation of economic, environmental, and health and safety benefits, costs, and risks associated with specific resource options, followed by the *integrated* consideration and evaluation of such costs, risks, and benefits in making determinations as to what resources should be procured, as well as which resources perhaps should be slated to be retired. The essential purpose of this kind of consideration is to provide the means by which it can be objectively shown whether particular resource options, on an overall cost/risk/benefit basis, deserve to join or continue in a utility's portfolio. In some cases, this kind of IRP evaluation will lead to determinations that particular resources may only join a utility's portfolio if certain risks or costs are mitigated, and will also help in specifying the necessary degree of mitigation that must occur. Only when resource procurement decisions are made in this way can the public and the State have confidence that the overall utility portfolios are constructed with an appropriately balanced and integrated consideration of economic, environmental, and public health and safety considerations.

Unfortunately, this is not the way resource planning and procurement presently is being done by the CPUC or the utilities. The kind of information required to fulfill a genuine IRP process is not being collected systematically by the State or the utilities, nor are resource procurement decisions rigorously subjected to an overall IRP-like framework. MFP refers the Commission to NRDC's August 2004 IEPR scoping comments for more detailed description of the kinds of information that are needed to support more meaningful IRP decision making (see footnote 2).

One of the basic functions of the IEPR is to set the overarching policy and planning framework for the State and the utilities to follow. While it is probably not feasible at this point to fully develop an implementable IRP framework between now and the issuance of the final IEPR, it *is* feasible to at least express the importance of moving toward such a process in the fairly near future and to articulate the basic IRP framework to which utility resource planning and procurement should be subjected. Doing so need not interfere with ongoing resource procurement, but it would have the salutary effect of

[2] See *Comments of the Natural Resources Defense Council (NRDC) on the 2005 Integrated Energy Policy Report Scope (h*ttp://www.energy.ca.gov/2005_energypolicy/documents/2004-08-18_hearing/2004-08-18_comments/JAFFE_NRDC.DOC)

signaling that certain existing deficiencies in current resource procurement need to be remedied expeditiously.

Much as the Commission has done in the Draft IEPR in numerous other areas, MFP urges the Commission to identify this existing deficiency, to express the importance of redressing it, and to articulate the fundamental importance of the State and its utilities moving toward true integrated resource planning as soon as practicable.

Nuclear Section

The "Nuclear" Section of the Draft IEPR Should be Expanded to Better Capture the Wealth of Information and Perspective Resulting from the IEPR Nuclear Power Workshop Process

The Draft IEPR devotes two pages to consideration of the State's nuclear policy issues and challenges into the future. The Commission held two days of workshops on California nuclear power issues, and contracted for a the preparation of a 143 page report entitled *Nuclear Power in California: 2005 Status Report.* The workshop resulted in 700 pages of transcripts and included numerous expert presentations and their associated materials and extensive public comments. As far as MFP is aware, the Commission's August 2005 nuclear power workshops were the first time in recent decades that significant attention has been paid to the question of nuclear power's place in California's energy future. Given the unique challenges and risks posed by nuclear power, given the prominence of nuclear power in California's existing resource mix, given the important decisions California faces regarding nuclear power continuing place in California's future, and given nuclear power's unresolved storage, transport, and disposal problems, MFP submits that the IEPR should significantly expand its consideration and evaluation of nuclear power, and that it can and should do so by making much more extensive use of the record developed by the IEPR nuclear power workshop process.

Commissioner Geesman stated during the October 6 IEPR hearing that the Commission intends to update its August 2005 Draft Consultant Report on nuclear power to incorporate information, perspectives, and concerns brought out during and following the August 15-16 workshops. MFP appreciates this commitment and trusts that this updated draft report will be subjected to the normal CEC hearing process, including soliciting public comments. However, given the Commission's current schedule for finalizing the 2005 IEPR, MFP questions whether and how additional material resulting from this process will meaningfully find its way into the final 2005 IEPR. If it is not feasible to extend the 2005 IEPR schedule it may be advisable to submit any further findings and recommendations coming out of the nuclear report update process after the 2005 IEPR is finalized. MFP respectfully requests that the CEC anticipate this appropriately in the Final 2005 IEPR, for example, by noting that further findings and recommendations are likely forthcoming and that they will be incorporated by reference into the 2005 IEPR.

In its notice for the August 2005 nuclear power workshops, the CEC posted a series of "Key Questions" that were to be used to frame workshop presentations and discussions. The CEC stated that these questions and responses to them would inform the IEPR. The Draft IEPR nuclear section reflects only some of the many important issues posed by the CEC and discussed during the workshops and in written materials and comments. MFP recommends that the updated draft nuclear report include studied and evaluative responses to the set of "Key Questions" that the Commission posed to various workshops. For convenience we have attached these "Key Questions" herein.

MFP Generally Supports the Findings and Recommendations Contained in the Nuclear Section of the Draft IEPR, As Far As They Go

As just noted, MFP believes that the nuclear section of the IEPR should be expanded in order to more fully reflect the wealth of information and perspectives resulting from the nuclear power workshops and to better address the questions posed by the CEC prior to these workshops. Nonetheless, the Draft IEPR subchapter on nuclear power contains several important findings and recommendations, all of which MFP support, as far as they go. However, MFP proposes several modest changes to some of these findings and recommendations, while also reserving the right to comment further once the nuclear power portion of the IEPR is expanded as per Commission Geesman's statement to that effect during the October 6 IEPR hearing.

On page 73 the Draft IEPR states:

> California also has an ongoing role in protecting public health and safety and assuring the cost-effectiveness of investments in electricity generation resources, including nuclear resources. Therefore, the state must consider potential extensions of operating licenses along with other resource options.

MFP understands the underlying intent of the first sentence above to be that new investments in energy resources—nuclear and otherwise—are to be subjected to rigorous economic, health, safety, and environmental evaluation, an intent that we strongly support. However, the second sentence, perhaps unwittingly, narrows the frame of such consideration only to instances in which the state is faced with a significant nuclear investment decision associated with a possible nuclear license extension. Strictly speaking, this narrowing excludes—we think improperly— the situation in which the state is faced with making significant investment decisions regarding existing nuclear power operations that do not concern a possible relicensing.

MFP submits that sound and rational energy planning dictates that *whenever* a nuclear power plant—or any other plant—may need a large infusion of capital to keep it operating or to extend its operation, and where ratepayers would be required to foot the bill, it is incumbent on the state to proactively evaluate whether that investment is both prudent and cost effective. As part of that obligation, as the quoted first sentence above

properly notes, the state should take public health and safety considerations as well as economic considerations into account. MFP therefore recommends that the above passage be amended as follows (new text underlined; deleted test in ~~strikeout~~):

> California also has an ongoing role in protecting public health and safety and assuring the cost-effectiveness of investments in electricity generation resources, including nuclear resources. Therefore, the state must evaluate ~~consider~~ potential operating extensions of its ~~operating~~ existing nuclear power plants--whether or not an NRC license extension is required-- ~~licenses~~ along with other resource options, taking economic, environmental, and public health and safety issues into account in an integrated manner.

Again, as far as it goes, MFP supports the CEC's further recommendation that the California Legislature should develop a suitable framework for reviewing the costs and benefits of possible nuclear plant license extensions. However, we believe that here, too, such a framework should be applied to any case in which a utility requests significant ratepayer funds in order to extend the operating period of its nuclear power plant.

The reason for this is simply a matter of sensible and consistent policy. The Draft IEPR properly notes the many unresolved problems and risks associated with nuclear power and the importance of "…assuring the economic cost effectiveness of investments in electricity generation resources, including nuclear resources." (Draft IEPR, p. 73) The unresolved and likely intractable problems of nuclear waste transport and disposal are the principal reasons for the state moratorium on new nuclear power plants. These problems, together with more recent heightened concerns about terrorism and marine environmental impacts, have led the CEC to recommend in this section of the Draft IEPR that the Legislature take action to develop an evaluative framework for considering the pros and cons of continued reliance on nuclear power. Such a recommendation is wholly appropriate as far as it goes *precisely because California does not now have such an evaluative framework*. Broadening the application of this evaluative framework beyond license extensions is needed because *any* operating period extension of a nuclear power plant poses essentially the same set of issues and problems regardless of whether an NRC license extension is at issue. Extending the operation of an existing nuclear power plant, with or without a license extension, causes more wastes to be produced and therefore raises the same transport and disposal issues. Likewise, extending plant operation extends the period of vulnerability to terrorist attack, natural disaster, marine environmental impacts, etc. For these reasons MFP requests that the Draft IEPR's recommendation to have the Legislature develop a suitable framework for evaluating the costs and benefits of possible nuclear license extensions be broadened, in the same manner as described by the above proposed language changes, to include operating period extensions that require discretionary action on the part of CPUC.

MFP also agrees with and supports the Commission's observation that with the presumed approval of PG&E's and SCE's steam generator replacement projects ("SGRP") it is likely that the utilities will pursue extended operating licenses from the

NRC. On this subject, MFP suggests that the IEPR be amended to include the observation that, unless adequately protected against through careful and thorough economic review, the regulatory environment under which the utilities operate may encourage them to pursue nuclear plant capital improvements in a piecemeal manner, since such an approach will tend to artificially inflate the benefit/cost conclusions for the project.

MFP submits that this is more than simply a hypothetical problem. In PG&E's pending SGRP application at the CPUC, PG&E has submitted and the CPUC has thus far agreed that the Diablo Canyon plant, once its steam generators are replaced in 2008 and 2009, is not reasonably expected to require any major capital expenditures through the end of the current license periods in 2025, fully 16 years later. The benefit/cost analysis submitted by PG&E and performed by the CPUC both contain this highly optimistic and questionable assumption, in spite of ample evidence within the nuclear power industry to the contrary. MFP believes that a more prudent review would have assumed that major capital expenditures during this 16 year period are at least reasonably likely and that they should have been quantified in some appropriate, probabilistic fashion. This is all the more reason why the CEC's recommendation to have the Legislature develop a comprehensive framework for analyzing the costs and benefits of prospective operating period extensions is an important one, and why such a framework needs to apply whether or not a license extension is at issue.

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MFP appreciates this opportunity to provide comments on the Draft 2005 IEPR and looks forward to participating in future IEPR processes.

Respectfully submitted,

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Attachment A

Comments of the San Luis Obispo Mothers for Peace To the CEC's 2005 Integrated Energy Policy Report Committee

Re: Energy Report: Nuclear Power, 2005 Workshops [04-IEP-1J]

August 23, 2005

Introduction

The San Luis Obispo Mothers For Peace ("MFP") appreciates this opportunity to provide written comments to the Energy Commission's 2005 Integrated Energy Policy Report ("IEPR") Committee [04-IEP-1J] following the August 15-16 workshops held on the subject of the future of nuclear power in California. MFP's comments focus on the report issued by the Energy Commission on August 5, 2005: *Nuclear Power in California: 2005 Status Report* (hereafter "August 5 Report").

MFP makes no attempt to be comprehensive in its comments with respect to all the issues and concerns that should be incorporated in fashioning a responsible set of policies with respect to nuclear power in California, and instead urges the Energy Commission to heed the many cautionary statements and analyses provided by workshop panelists (specifically, Peter Bradford, Dr. Gordon Thompson, Amory Lovins, Dr. Paul Craig, Peter Douglas, Matt Freedman, Victor Gilinsky, Assemblyman Blakeslee, and Rochelle Becker) participating in the CEC's IEPR workshop process. Among other things these panelists made clear that the nuclear power resource has

- Unsolved waste transportation/storage/disposal problems;
- Fundamentally uncompetitive economics relative to other energy resource options;
- Fresh concerns re terrorism /security and seismic risks;
- Dangerously negligent federal agency oversight;
- Unique low probability, high consequence risks that must be included in analyses of nuclear power's proper place in California's energy future.

MFP's comments focus on a fundamental and largely overlooked problem with the overall policy framework that is being applied implicitly by the Energy Commission's August 5 Report on nuclear power. This problem is also evident in the state's overall energy policy framework as reflected in the CEC's 2003 and 2004 Integrated Energy Policy Reports and the joint CEC/CPUC Energy Action Plan that is now being updated. In short, MFP believes that nuclear power is not presently being subjected to the same set of rigorous resource planning criteria as are other resource options in California. For reasons explained nowhere, important nuclear power procurement decisions are in the process of being made without the benefit of the rigorous planning framework that

California's energy agencies assert ought to be and are being applied in the state's energy procurement decisions. The likely result of this inconsistent treatment is that California may well soon sanction continued reliance on nuclear power—specifically, the extended operation of Diablo Canyon Nuclear Plant ("DCNPP") and the San Onofre Nuclear Generating Station ("SONGS")—without subjecting these decisions to proper scrutiny. MFP submits that it is not yet too late to apply adequate scrutiny in making these decisions and urges the Energy Commission and the California Public Utilities Commission ("CPUC") to do so.

Prior to and including the August 5 report, nuclear power is not addressed in an integrated manner with California's other electricity resource options. Whereas each and every resource option should be—and according to state energy policy is supposed to be—analyzed and compared on a consistent basis, accounting for each resource's respective lifecycle costs and non-cost attributes,[3] nuclear power is not being treated in this even-handed manner. Instead, despite 1976 state legislation declaring that nuclear power is an imprudent option unless and until the problems of nuclear waste transport, storage, and disposal are satisfactorily resolved; despite the fact that these worrisome problems have not yet been resolved; and despite numerous other unresolved problems and concerns associated with this technology, nuclear power unaccountably appears to be largely enjoying a free pass from the rigorous cost/risk/reliability scrutiny that is being applied to all other resource options. In view of the unique risks, costs, and challenges posed by nuclear power, MFP believes that this exclusion from rigorous evaluation represents extremely poor policy and practice and that it can and should be remedied immediately. Whatever place nuclear power has in California's energy future should be decided only *after* a systematic and rigorous examination of its pros and cons and compared in an integrated manner with the pros and cons of all other available resource options.

As Amory Lovins explained so clearly and powerfully during the August 15-16 workshops, the quest for adequate and reliable energy services does not and should not mean "going out and getting everything that you possibly can." This strategy is both cost prohibitive and virtually guaranteed to get too much of what society does not want and not enough of what society really does want. The economic and non-economic attributes of the various options must be evaluated carefully and analyzed systematically so that California consistently gets the blend of resource options that best exemplifies true societal least-cost resource planning and procurement.

The August 5 Report Fails to Apply Integrated Resource Planning ("IRP") Principles in its Consideration of Nuclear Power's Pros and Cons

For all its strengths, the August 5 Report fails to apply integrated resource planning principles ("IRP") in its consideration of nuclear power's pros and cons. As a

[3] This approach is most commonly referred to as "integrated resource planning." The hallmark principle underlying this method is that resources are chosen on the basis that they offer the societal least-cost means of filling a particular resource need. "Societal least-cost" means that both direct and indirect costs are included in the determination of least cost, as well as costs and risks that are real but difficult to quantify.

result, some of its conclusions appear to be unwarranted. Below is a brief review of a few of the Report's IRP-related shortcomings.

Cost Effectiveness Analysis

Throughout the August 5 Report are statements that the use of nuclear power displaces gas use on a one-to-one basis (see, e.g., ES-2). This comparison is used in making further statements about the cost effectiveness of DCNPP and SONGS. The August 5 Report appears to rely solely on statements by PG&E and SCE in this regard and does not appear to perform any actual evaluation or analysis of these statements, despite the powerful effect they have on the apparent cost effectiveness of the SGRPs. MFP is concerned that no independent perspective is applied to these statements, but we are even more concerned at the lack of an appropriate integrated resource planning perspective being applied (see footnote 1). Using an integrated resource planning perspective, one would first have to determine how much gas, on a least-cost societal basis, deserves to be in the mix of resource options that would take DCNPP's or SONGS's place. Then and only then would one be in a position to determine the net effect on GHG emissions associated with replacing the nuclear power generation. The notion that gas-derived power would replace 100% of the nuclear power output produces a badly distorted view of the purported cost effectiveness of nuclear power. MFP urges that this narrow perspective be replaced with an appropriately integrative, robust, and comprehensive resource planning perspective in the 2005 IEPR, one that emphasizes the systematic identification and selection of resources according to societal least-cost planning principles.

Greenhouse Gas Emissions Analysis

The August 5 Report makes the analogous mistake in reporting the impact on greenhouse gas ("GHG") emissions that would be associated with replacing nuclear power resources, i.e., it assumes that gas-derived electricity replaces 100% of this output. (See, e.g., ES-2.) Once again, the 2005 IEPR should be amended to say that the net GHG effect of reducing nuclear power output may only be determined through a rigorous integrated resource planning analysis.

In its GHG analysis the August 5 Report makes another factual mistake, as can be seen in the following statement: "[Nuclear power] emits fewer greenhouse gases than most other power sources." (ES-2.) In fact, while nuclear power emits fewer GHGs [per unit power output] than electricity derived from gas, oil, and coal, it does not emit fewer GHGs than at least six other types of resource options: wind, solar thermal, solar photovoltaic, geothermal, energy efficiency, and hydropower.

Natural Gas Price Analysis

The August 5 Report asserts that California's use of nuclear power helps to reduce the cost of natural gas by reducing gas demand. It then proceeds to cite various estimates of this effect, all of which assume the same 100% displacement as noted above.

A proper analysis of the gas-price reducing impact associated with nuclear power would need to include consideration of how much gas would truly need to be used in phasing out either or both DCNPP and SONGS. Moreover, in such an analysis, all the other non-gas resource options "loaded up" in the analysis would also need to receive their proportionate gas-price-reduction credit. Only then would this price effect be captured in a consistent manner. As currently stated, the August 5 Report exaggerates nuclear power's gas-price reducing effect.

Silence on the Radiological Nature of the Risk Posed By Nuclear Power

The August 5 Report is completely silent on the radiological nature of the risk posed by nuclear power. This is especially worrisome given that it has essentially been 30 years since the State of California has focused on the question of the appropriate role of nuclear power in California's energy future. MFP recognizes that the Nuclear Regulatory Commission has exclusive jurisdiction over the radiological aspects of nuclear facilities, but this hardly means that radiological concerns have no place in the meaningful consideration of California's nuclear energy policy. These concerns gave rise in 1976 to California's existing moratorium on new nuclear power plants. These concerns could also potentially lend significant support to a future decision by the CPUC that certain investments in existing nuclear power plants are imprudent on the grounds that such investments are not in the best economic, health, and safety interests of Californians. Likewise, the Legislature could also act with respect to these same interests in a way that discourages further use of nuclear power in California. In other words, the NRC may mandate radiological safety standards but it may not mandate continued use of nuclear power. California has a vital say in the place of nuclear power in its energy future and it is therefore imperative that the State have an up-to-date understanding of the science regarding the radiological aspects of nuclear facilities.

California's Nuclear Energy Policy is Largely and Inappropriately Being Made *De Facto* in Two SGRP Applications Before the CPUC

In order to understand the state's current energy policy framework, perhaps the best documents to consult are the Energy Commission's 2003 and 2004 IEPRs and the joint CEC/CPUC Energy Action Plan. Between them they arguably set out both the broader energy policy commitments of the state as well as the more immediate procurement processes and priorities. It is from these documents that one might reasonably expect to understand the place accorded nuclear power in California, and specifically, its pros and cons relative to other possible resource options, as California continues to find its way to a sound, sane, and cost-effective energy future.

The expectant reader would be disappointed, and perhaps mystified. The Energy Commission's 2003 and 2004 IEPRs are almost completely silent on the appropriate role to be played by nuclear power in the coming decades. The sole references to nuclear in those documents concern the vulnerability of the grid to nuclear plant outages, certainly an important concern about California's reliance on nuclear power but hardly the only one. Furthermore, none of the various iterations of the state's Energy Action Plan,

including the most recent iteration,[4] even mentions nuclear power. MFP is concerned that the virtual omission of nuclear power from these critical policy documents has the unwitting but nonetheless detrimental effect of creating a nuclear policy vacuum. In such a vacuum, nuclear power decision making is increasingly subject to matters of expediency rather than matters of policy or planning principles. MFP believes that this is imprudent and potentially dangerous, both with respect to ratepayer interests and the broader environmental, health, and safety interests of California citizens.

This nuclear policy vacuum might only be a matter of theoretical or academic concern were it not for the fact that PG&E and SCE each has an application before the CPUC to extend the operating lives of DCNPP and SONGS, respectively, by replacing their degraded steam generators with new ones. The CPUC is now poised to issue decisions in both of these cases, decisions that will *de facto* express California's nuclear power policy.

The CPUC has Failed to Use IRP Principles in its Consideration of the Advisability of Approving PG&E's and SCE's SGRP Applications

Even though the state's key energy policy documents have not paid any significant attention to nuclear power, thereby depriving decision makers of a policy context in which to view the SGRP applications, it is still conceivable that the state could carefully scrutinize the prudence of extending the operating lives of DCNPP and SONGS. It could do this through the discretionary role played by the CPUC in evaluating PG&E's and SCE's respective applications for ratepayers to foot the bill for the new steam generators. The fact of these applications, together with the fact that these applications triggered the need to perform Environmental Impact Reports pursuant to the California Environmental Quality Act, potentially give the CPUC the opportunity to perform true and meaningful integrated resource planning with respect to whether each of these two projects is truly in the public interest. However, as can be seen below, the CPUC thus far has failed to do so. Instead, it has taken an extraordinarily narrow approach to the question of whether DCNPP's and SONGS's operating lives should be extended.

The CPUC Has Refused to Consider the Entire Set of Economic, Environmental, Health, and Safety Risks and Impacts Associated with Nuclear Power Generation and Nuclear Waste Transport, Storage, and Disposal.

For each of the DCNPP and SONGS SGRP applications the CPUC held evidentiary hearings and is preparing an Environmental Impact Report. Among the CPUC's responsibilities in such applications is to protect ratepayer interests and to

[4] This is so despite the fact that MFP submitted invited comments on the version of the EAP immediately prior to the August 12 version (*Comments of the San Luis Obispo Mothers for Peace On the Revised Energy Action Plan II Draft*, August 3, 2005). The August 12 version of the EAP continues to omit any mention of nuclear power.

provide for the well being of the environment and public health and safety, and most broadly, to represent the overall interests of the public.

Despite this broad set of responsibilities the CPUC has viewed its responsibilities in the SGRP cases quite narrowly. For one, it took the applicants' stated purposes—to replace the old steam generators—as givens, rather than as an expression of the need to consider how best the state could meet the energy service needs that over the next decade would be created by the demise of the DCNPP and SONGS steam generators. An appropriately broad analysis of this question would need to include consideration of the entire set of economic, environmental, health, and safety risks and impacts associated with nuclear power generation and nuclear waste transport, storage, and disposal.

The CPUC conducted no such analysis in the evidentiary portion of the proceeding, choosing instead to focus on a narrow set of economic issues. Moreover, in its economic analysis it consistently valued at zero the probability of occurrence of high consequence events like terrorist attacks, accidents, and damage from earthquakes, thereby giving these real and worrisome possibilities absolutely no weight in the economic analysis. Coupled with these unfounded and unreasonable assumptions is a forecast that no capital costs will be incurred in order to prevent and/or protect from such high consequence incidents.

In the EIR's, the CPUC should have but did not rigorously analyze the environmental, health, and safety risks and impacts associated with nuclear power generation and nuclear waste transport, storage, and disposal. Despite the pleas of several state agencies, the MFP, several environmental organizations, and numerous individuals, the CPUC has chosen thus far to exclude from the analysis in the EIR's all environmental, health, and safety issues associated with the extended operating period made possible by the new steam generators. Likewise, it has also chosen to ignore the environmental, health, and safety issues associated with the increased burdens of radioactive waste storage, transport, and disposal created by these extended operating periods. In short, while the CPUC is poised to make discretionary decisions regarding the advisability and prudence of extending by ten or more years the operating lives of California's two operating nuclear plants—including possible 20-year license extensions—it has chosen not to analyze the potential environmental, health, and safety impacts and risks of doing so, despite the fact that the California Environmental Quality Act exists for this very purpose and requires that such an analysis be performed.

The CPUC Has Refused to Pay More Than Cursory Attention to the Potential for Non-Nuclear Resources to Substitute for the Degraded Steam Generators to be retired by 2014

While each SGRP proceeding could and should have been done according to the principles of integrated resource planning,[5] unfortunately this has not been the case. The

[5] Indeed, with respect to its own pending SGRP application for SONGS, SCE has expressed this exact point: "the SONGS 2&3 SGRP application presents the Commission with a question of long term resource

CPUC could have consulted the records in its own proceedings as means of performing an appropriate analysis of whether or not the SGRPs are the best way to meet the energy service needs required as a result of the demise of DCNPP's and SONGS's steam generators. Indeed, the CPUC has active cases addressing energy efficiency, renewable energy, distributed generation, and demand response, as well as a master proceeding (R.04-04-003) whose purpose is to consider all these resource options in an integrated manner for each of the utilities and from them fashion sound long term resource plans.

There is no question that the CPUC has a wealth of information on the range of possibilities for filling the energy service deficit that will be created when the degraded DCNPP and SONGS steam generators are no longer operable. MFP and others urged the CPUC to undertake this analysis in EIR scoping comments[6] and in its extensive comments on the DCNPP Draft EIR.[7] Despite the compelling need for this sort of analysis, in its EIRs the CPUC did not meaningfully consult the records in these other proceedings, nor did it otherwise attempt to formulate alternative, environmentally superior resource plans to the SGRP applications. Instead, it paid only cursory attention to the question of environmentally superior alternatives and readily dismissed them.

With its Ignorance of the Environmental, Health, and Safety Issues and its Unanalyzed Dismissal of Resource Alternatives the CPUC Failed to Perform Meaningful Integrated Resource Planning in its Consideration of the SGRP Applications

By failing to analyze the potential environmental, health, and safety impacts and risks associated with extending the operating lives of DCNPP and SONGS, and by failing to meaningfully study the potential for other resource options to take the place of the SGRPs, the CPUC has clearly failed to practice integrated resource planning in its consideration of these two applications.

The August 5 Report Makes No Note of the Narrow Analytical Frame Employed by the CPUC in Considering the Pros and Cons of Extending the Operating Lives of DCNSS and SONGS

The August 5 Report pays attention to some (although not all) of the issues that bear on the advisability of continuing to rely on nuclear power in California, including waste storage, transport, and disposal; terrorism, seismic, and tsunami concerns; and

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planning for the state, SCE, and SDG&E" (SCE Motion for Order to Show Cause, pg. 3; April 23, 2004, A.04-02-026).

[6] MFP's DCNPP pre-EIR scoping comments can be found at http://www.cpuc.ca.gov/environment/info/aspen/diablocanyon/scoping/c2_GRA_cover_ltr.pdf.

[7] MFP's DCNPP DEIR comments can be found at http://www.mothersforpeace.org/data/Joint%20Parties%20Comments%20on%20DCPP%20SGRP%20DEIR.pdf.

marine environment impacts. However, in the Report's consideration of the treatment of the current SGRP cases before the CPUC, *no attention at all is paid to the fact that the CPUC thus far has essentially relegated all these issues outside the analytical frame it is using to make its decision.*

The preparers of the August 5 Report could easily have ascertained from the record of the two SGRP cases that the CPUC has decided to restrict the environmental, health, and safety analysis in the EIR to those issues posed solely to the construction-related portions of the steam generator replacement projects. These projects would extend the operating lives of DCNPP and SONGS by at least a decade or so, considerably more if PG&E and SCE pursue and secure new licenses, since the new steam generators would make relicensing increasingly feasible and likely. This would result in increased amounts of operational and waste storage, transport, and storage potential impacts and risks, and increased marine environmental impacts, as well as other potential impacts and risks. *These facts are unaccountably ignored in the August 5 Report, significantly undermining its ability to provide a suitable foundation for evaluating and making decisions about the appropriate future role of California's currently operating nuclear plants.*

These omissions are particularly surprising, as well as disconcerting, given that it is MFP's understanding that the Energy Commission contract under which the August 5 Report was prepared is held by the same firm that prepared both the DCNPP and SONGS EIRs for the CPUC. There can be no question that the Energy Commission's contractor was not aware of the narrow approach being taken in the preparation of the CPUC's SGRP EIRs. In a report purported to be an objective examination of the current status of nuclear power in California (which seems to be questionable given that the same firm is preparing both SGRP EIRs and holds the contract under which the August 5 Report has been prepared), with an eye to its appropriate future, surely it is worth bringing to policymakers' and the public's attention that an assessment of life-extension applications of California's two operating nuclear power plants is expressly *excluding* the potential impacts and risks associated with these extended operating periods.

The CPUC's Narrow Analytical Approach to Evaluating PG&E's and SCE's Life-Extension Applications Promises to Result in Decisions Strongly Biased Toward Nuclear Power

There should be no question that unless the CPUC reconsiders its exclusion of operating impacts and risks from its analysis of PG&E's and SCE's SGRP applications, the resulting CPUC decisions will contain a strong, unjustified pro-nuclear bias. While MFP does not believe that any resource option should be unjustifiably preferred, placing its faith instead in practicing meaningful integrated resource planning as the basis for making resource decisions, we believe that this bias is particularly egregious in light of the state's 29-year old moratorium on new nuclear power. While DCNPP and SONGS are not new plants, the *policy basis* for the moratorium—the unresolved problems of

nuclear waste transport, storage, and disposal—applies equally to extending a plant's operating life as it does to considering the construction of new nuclear plants.

Additional Comments Related to the August 15-16 Nuclear Power Workshops and the August 5 Report

Following is a list of additional comments that MFP submits for the consideration of the IEPR Committee.

Seismic Risks – The design basis earthquake needs to be revised to reflect current research. San Luis Obispo County, the MFP, and other parties have raised concerns about DCNPP's seismic adequacy, but since the NRC has jurisdiction, this concern is completely discounted by the CPUC and not seriously analyzed in the SGRP application proceeding. A reasonable view would be to at least consider that the NRC might not act to afford an adequate level of protection from this potential risk and to consider this as an unmitigated risk.

Terrorism/Enhanced Security – The "design basis threat" needs to be upgraded.

Indefinite On-Site Spent Fuel Storage – Unless and until the long-term problem of high-level radioactive waste is solved California should not allow license renewals for DCNPP or SONGS.

Relicensing – MFP supports the Office of Ratepayer's suggestion presented during the August 15-16 workshops that SCE and PG&E be required to file any relicensing intention with the CPUC before going to the NRC.

Spent Fuel Pools – The pools should be returned to their original densities.

Nuclear Waste Transportation – MFP does not believe that the transportation of nuclear wastes can be done safely and we do not support the transportation of high-level radioactive wastes. We believe that they should be secured on site. At the same time we believe that the current ISFSI plans at DCNPP are inadequate.

Aging Nuclear Plant Components – According to industry experts, as well as MFP's witness in the DCNPP SGRP proceeding, steam generator replacement would likely be followed by other large capital improvements; without considering such improvements now will likely lead to piecemeal decision making by the CPUC.

Water Quality – There continues to be significant, unmitigated entrainment and thermal discharge impacts on the marine environment at DCNPP.

Emergency Planning – Current emergency preparedness is inadequate at DCNPP, as dramatically illustrated during recent seismic events.

Proliferation – The risks of nuclear proliferation need to be explicitly included in analyses of nuclear power's possible future in California.

Federal Subsidies – Any consideration of nuclear power's economics must include an analysis of the subsidies provided by the federal government.

Federal vs. State Jurisdiction – California has the authority to decide the place of nuclear power in its future. While the CPUC may not impose more stringent safety standards on plant operations it can certainly make the finding that continued use of nuclear power—for a whole host of reasons—may not be in the state's best interests. The Legislature may do the same.

Conclusion

California has a worrisome nuclear policy vacuum, as evidenced by the omission of any discussion of the appropriate place of nuclear power in the state's key energy policy documents, and by the CPUC's handling of the DCNPP and SCE SONGS applications. The August 5 Report is a helpful, partial corrective, but it is not enough. California needs a strong, consistent policy approach to the consideration of the continued use of nuclear power – in short, nuclear power options should be evaluated through a rigorous integrated resource planning process just like every other resource option. The Energy Commission's August 5 Report, the 2005 IEPR that it informs, and the state's Energy Action Plan should all be amended to require such even-handed treatment of nuclear power *vis a vis* other resource options. It is not too late to make these amendments and to reconsider the future of DCNPP and SONGS in light of sound and rigorous integrated resource planning principles. Furthermore, whether or not the CPUC reconsiders its present positions on the SGRPs, it is still vitally important that the Energy Commission fashion its 2005 IEPR, and that the Energy Commission and the CPUC jointly refashion the Energy Action Plan, to provide for rigorous, systematic, comprehensive integrated resource planning of all future considerations of the appropriate place of nuclear power in California's energy future, and that such consideration give full weight to the unique impacts, risks, and challenges associated with this particular power technology.

Respectfully submitted,

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Attachment B

[Excerpt from the CEC's July 15, 2005 website posting]

Notice of Committee Workshop on Issues Concerning Nuclear Power

The following "Key Questions" will be the subject of panel discussions at the workshop. Other participants may respond to these questions in their oral and written comments. Policies and issues discussed in this workshop will inform the development of the Energy Commission's Energy Report and associated energy policy recommendations to the Governor and Legislature. A workshop agenda will be available shortly.

Key Questions

Monday - August 15, 2005

Current Status of Federal Spent Nuclear Fuel Storage/Disposal Programs

- What is the current status of and what are lessons learned from the Yucca Mountain Project?
- What is the current status of efforts to locate centralized interim off-site storage facilities in the West? What are the trade-offs among the potential sites for such a facility?
- Most spent fuel is currently stored at interim on-site storage facilities. What is the likely timeline for moving this nuclear waste to another location?
- What are the trade-offs between interim and permanent waste disposal storage facilities?

Implications of Waste Disposal Issues for California

- What are the trade-offs between interim storage facilities located at either the individual reactor sites or a centralized location in the West?
- What are the implications of maintaining on-site storage of spent fuel at the individual reactor sites for at least the operating period of the reactors?
- The U.S. Court of Federal Claims issued an opinion and order in the case of the Sacramento Municipal Utility District (SMUD) versus the U.S. Department of Energy (DOE) that determined that DOE's failure to begin disposing of the spent fuel on January 31, 1998, as required by DOE's standard contract with SMUD,

was a breach of contract. What is the current status of the legal efforts of California utilities to achieve the ratepayer benefits that were supposed to result from their contracts with DOE for waste disposal? What are the consequences to California of DOE's failure to dispose of this spent fuel by 1998 as required by DOE's contracts with the utilities?

- What is the current status of legal efforts to require the Nuclear Regulatory Commission to consider the implications of terrorism in its review of interim fuel storage facilities at the individual reactor sites?

- What are the implications for California of transporting spent fuel to either Yucca Mountain or a centralized interim storage facility in the West?

Tuesday -- August 16, 2005

California's Operating Commercial Nuclear Plants

- What are the expected fuel cycle costs (including costs for operation and maintenance, plant upgrades, spent fuel storage and disposal, decommissioning, security) and benefits (including direct economic benefits and reduced greenhouse gas emissions) of operating California's commercial reactors through their current license periods?

- What is the current status of various projects to maintain continued operation of these reactors through their current operating licenses, e.g., steam generator replacement, other plant upgrades, interim fuel storage, etc.? If existing reactors were shut down, what resources would take their place?

- What are the environmental impacts, permit conditions and mitigation measures associated with the intake and discharge of coastal water for cooling these plants?

- How will the California Public Utilities Commission allocate between ratepayers and shareholders the potential risks from cost over-runs or performance problems of these reactors?

- What are the security, seismic, and safety issues associated with the continued operation of California's nuclear power plants?

Future of Nuclear Energy Policy

- The National Commission on Energy Policy in its December 2004 report "Ending the Energy Stalemate: A Bipartisan Strategy to Meet America's Energy Challenges" at www.energycommission.org has proposed an overall energy policy package, which includes a nuclear policy element. The National Commission on Energy Policy also indicated that a "substantial expansion" in nuclear energy would require surmounting four substantial challenges (reducing the costs of reactor construction and operation, simultaneously achieving a ten-

fold or more reduction in the probability of a major release in radioactivity resulting from not only malfunction and human error but also terrorist attack, the federal government demonstrating to the utilities and the public that it can meet its obligations to take possession and sequester the highly radioactive spent fuel from reactor operations, and that a highly effective international program be established to resolve the risks of proliferation). How likely is it that these four challenges can be surmounted?

- What are the likely costs and benefits of the U.S. Department of Energy's Nuclear Power 2010 program? To what extent does this program address the four substantial challenges identified by the National Commission on Energy Policy?

- What is the current status of new nuclear energy technologies? What are the potential safety and cost trade-offs of emerging nuclear reactor technologies and alternative fuel cycles?

- What is the current status of spent fuel reprocessing domestically and internationally? What are the potential tradeoffs among reprocessing technologies? Are there "lessons learned" from the international experience to date?